



Acting Chairman Michael Copps  
Commissioner Jonathan Adelstein  
Commissioner Robert McDowell  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: WC Docket No. 09-51

June 8, 2009

Dear FCC Acting Chairman and Commissioners:

The Internet Innovation Alliance (IIA) offers this submission in response to your request for comments published on April 8, 2009. IIA is a broad-based coalition of business and non-profit organizations that aims to ensure that every American has access to broadband Internet. IIA has long supported a comprehensive national broadband strategy to complement market efforts to achieve universal broadband availability and adoption.

## **I. Introduction**

Not long ago the biggest public policy challenge for universal broadband was inaction. America had no national strategy for guiding policy makers' efforts and informing private actors. We had never invested in national broadband mapping to understand where high-speed Internet was offered and where it was lacking. We had no concerted policies to bring broadband to unserved areas or people who could not afford it. There was little coordination among government agencies focused on connecting health centers, educational institutions or affordable housing, and uncertainty about government's plans and commitment.

Things have certainly changed. No longer suffering from inattention, the biggest broadband challenge today may be avoiding errors of commission... ensuring we take the *right* actions. Much needs to be done by the private sector and by government, and the FCC is to be commended for leading this important effort. Approached sensibly, the unprecedented public investments in broadband offered by the recovery legislation will greatly complement the more that \$60-\$80 billion invested annually by the private sector and meaningfully advance America's broadband status.

An effective National Broadband Strategy will enable the government to partner with the private sector to extend broadband service to every corner of the country, while at the same time raising awareness of its benefits. A national broadband strategy should also evolve as technologies improve, and as we learn more from broadband mapping and from



the return on initial stimulus investments. The best strategy will start by examining where we stand today and then identify policies to get us where we want to be.

## **II. Where We Stand Today**

Americans without broadband today tend to fit into one of three categories:

- those who cannot get broadband;
- those who do not want broadband; and
- those who cannot afford broadband.

It is important to understand each category if we are to effectively connect our entire nation.

### **Those Who Cannot Get Broadband**

Approximately 9-10 million households lack access to broadband services according to the latest data offered by Pew Internet and the American Life project. Analyst SNL Kagan indicates cable's [high-speed Internet \(HSI\) service](#) is available to 92 percent of the households in the U.S., or about 120 million homes. (<http://www.ncta.com/IssueBriefs/3024.aspx>). While broadband cannot be said to be universally available when 10 million American homes lack any option, the current state of availability is nevertheless remarkable given the fundamental newness of broadband technology. While it took 55 years for automobiles to reach 25 percent of our population, and 46 years for electricity to similarly reach a quarter of Americans, broadband became available to more than 90 percent of our citizens (and adopted by more than 50 percent) in basically less than a decade. Virtually every analyst agrees that the vast majority of those with no broadband option are rural Americans, where the lack of linear population density combines with difficult terrain to inhibit private investment.

### **Those Who Do Not Want Broadband**

While more than 90 percent of Americans *could* subscribe to broadband, only about 62 percent of households elect to do so according to the U.S. Census Bureau. Cost is a significant barrier to adoption, but it isn't the only reason consumers fail to see the value of spending on broadband. Research suggests that many people weigh factors other than cost when they decide to pass up broadband services. In the 2008 study by the Pew Internet & American Life Project, a third of those who described themselves as non-Internet users said they just weren't interested in getting online. For many of them, information technology is unfamiliar and even scary. Some worry about information overload, while others view the online environment as a dangerous place, filled with inappropriate and irrelevant content, risks to privacy or unacceptable risks of fraud.



Latinos and African Americans spend more than white Americans for cellular, cable and satellite technologies and features. Yet these same groups are less likely to be connected to broadband than white or Asian Americans. Many non-subscribers of color don't value broadband because the increased benefits to them and their families simply aren't apparent.

There is an inverse relationship between one's age and broadband adoption. Only 19 percent of Americans age 65 or older reported a home broadband connection, compared to 70 percent in the 18-29 age group, 69 percent for 30-49 year olds, and 50 percent for those between age 50 and 64.

### **Those Who Cannot Afford Broadband**

Over the last several years, steep price declines have coincided with dramatic increases in the number of Americans who have broadband service at home. Even so, many families still can't afford to pay for broadband, especially in the current economic climate, or else they do not see the value in spending precious family resources on access.

While broadband adoption rates vary significantly based on several demographic factors, none is more significant than income. There is a direct relationship between income and educational attainment and broadband uptake. More than 82 percent of households with annual incomes in excess of \$75,000 had broadband connections in their homes in 2008 compared to fewer than half of households with annual incomes of less than \$40,000. Twenty-eight percent of American adults who did not complete high school reported a home broadband connection in early 2008, compared to 40 percent of high school grads and 79 percent who had earned a college degree.

This does not mean that lower income Americans value broadband less than their wealthier neighbors. By contrast, poorer citizens may value high speed connections even more, and certainly their need for access to government services and information, educational opportunities and health care knowledge are no less. Rather, these citizens perceive the price of service as a barrier.

### **Who Is Investing in Broadband (and Who Will Be When the Stimulus Ends)**

A sensible national broadband strategy should avoid creating new entitlements or a permanent need for future subsidies. It is therefore important to consider the three sources of investment in broadband networks likely to outlast the federal stimulus and sustain long-term broadband deployment needs:

- the private sector;
- states and localities; and

- the federal government.

### **Private Sector Leadership**

The lion's share of annual investment in American broadband networks comes from the for-profit private sector. In each of the last several years, the private sector has invested between \$60 billion and \$80 billion to expand and enhance broadband networks. For example, Verizon has said it expects to make \$17 billion in capital expenditures in 2009, close to what it invested in 2007 and 2008. AT&T likewise has said it will invest as much as \$18 billion in 2009, also roughly the same as its 2007 and 2008 totals, while T-Mobile recently reported it spent \$3.6 billion in capital expenditures in 2008, up from \$2.7 billion in 2007. The cable industry reports investing more than \$145 billion since 1996 to build two-way, interactive networks with fiber optic technology, and the wireless industry is likewise investing in robust data networks.

### **State & Local Investments**

While states have typically taken a back seat to private actors and federal governments in investing in broadband, several have acted successfully to promote broadband adoption. Michigan was one of the first movers, reforming rights-of-way laws under Governor John Engler and establishing a coordinating authority more than five years ago. California has completed one of the most extensive broadband mapping exercises in the country, and it is presently executing to a strategy carefully crafted by public and private leaders working together. State and local actions to enable broadband have included loan matching, deregulation/tax reduction for competitive voice or video services, direct municipal investments and community demand aggregation. One of the most successful efforts at rural deployment has come from a public-private partnership called Connect Kentucky, which boosted broadband availability 58 percent and broadband usage 100 percent in the four years since the program started in the Bluegrass State. These increases were a result of a public investment of approximately \$7 million and private investment for broadband build out of more than \$800 million.

### **Federal Investments in Broadband**

Congress approved \$7.2 billion for broadband in the economic stimulus package. This more-or-less matches annual federal investments to subsidize regular telephone service to high cost areas provided by the federal Universal Service Fund (USF) program. To-date, USF has not directly targeted broadband deployment and adoption, but these subsidies undoubtedly have enabled providers to upgrade their networks. Congress has devoted millions towards Rural Utility Service loan guarantees over the past decade, though carriers have subscribed to only a portion of those funds for deployment projects so-far.





The FCC awarded \$417 million in grants to expand broadband Internet access to rural medical facilities over three years, as part of a pilot program aimed at extending broadband access lines to about 6,000 hospitals, research centers, universities and clinics in isolated areas, most of which still rely on dial-up Internet access.

### **III. Where Do We Go From Here?**

As policy makers combine their eagerness for swift action with the admonition to first do no harm, several basic principles should guide their efforts:

- Focus on what we know while we learn what we need to know. We know roughly 10 million households lack any broadband options at all, and connecting them requires billions of dollars. By contrast, policy makers need more research to better understand why Americans who could subscribe choose not to. The National Broadband Strategy should not rush decisions that will benefit from the broadband mapping currently under way, and the FCC should seek greater qualitative information on why many Americans are choosing not to subscribe to broadband where it is available.
- Tap local knowledge. While federal leadership is welcome and long overdue, states and localities have much to offer to the discussion. Those from Washington who are here to help should work closely with Mayors, Governors and community leaders, seeking every opportunity to empower those on the ground who are closest to challenges and most creative in customizing answers.
- Enable entrepreneurs and plan for major innovations. The one thing we know about the broadband marketplace is that it will continue to change rapidly. This has been a very good thing for consumers and innovators. Federal investments in broadband should never lock communities or the market into specific technologies or standards. While government planners should reflect previous experience, such as the benefits of connecting libraries and community technology centers, they should also enable game-changing technologies to transform the landscape.
- Implement sustainable solutions. We must take care to avoid new entitlement programs, connecting communities and individuals with broadband offerings that they can never afford to maintain. Government investments that lack sustainable funding are not sound investments in our future. Similarly, federal regulations to direct one-time grants should complement, not imperil, the \$60-\$80 billion annually invested by private actors in the telecommunications marketplace. When the federal dollars are gone, private investment will be more essential.



Consistent with those principles, we offer the following policy recommendations for promoting universal broadband deployment and adoption:

- The Department of Commerce should include questions on broadband usage and adoption (and non-adoption) as part of the 2010 decennial census survey. Researchers should use this data, and ideally data gathered through NSF studies, to better understand the facts and decisions that influence broadband demand.
- Congress should spur investment in infrastructure by providing tax credits for broadband-related upgrades to network capacity. Like the R&D tax credit, such credits should be based on improvements over status quo, but should be technologically neutral.
- The FCC should encourage investment in new technologies by reducing the regulatory obstacles to deployment of broadband over power lines and higher-speed wireless networks.
- Congress should reform the Rural Utility Service loan guarantee program. We suggest convening a commission of experts to review the RUS program and assess how to maximize return on investment dollars and ensure the program is fully used and useful.
- Congress should create a Rural Broadband Fund (RBF) as part of an “infrastructure bank” to reach unserved communities. The government might auction large competitive, one-time federal infrastructure grants to any investors who offer the best commitments to build or upgrade infrastructure in unserved rural areas.
- Congress should re-purpose the Universal Service Fund for broadband, basing eligibility on demography, not geography. The Universal Service program currently rewards inefficiency, provides subsidies to carriers irrespective of the financial needs of the carrier’s customers and reflects the state of the telecommunications industry and telecommunications technologies as they existed decades ago. The Universal Service Fund should reflect the broadband era and promote broadband expansion, and should not continue funding analog technologies and basic telephony.
- Congress and state and local leaders should ensure adequate funding for community technology centers, particularly at libraries and community colleges and similar institutions. Such centers are particularly valuable in providing access for people with low incomes, recent immigrants and people for whom English is a second language. They also serve to increase digital literacy and familiarity with information technology and online content.





- Congress should spur investment in equipment by accelerating the depreciation schedules for capital expenditures in broadband equipment. Doing so would better reflect the actual life cycles of such equipment and encourage higher capacity. It also should remove regulatory barriers to deployment (more spectrum allocations for commercial use, both licensed and unlicensed, tower siting, rights-of-way).
- The President should issue an Executive Order declaring that federal investments made in affordable housing will require such properties to be “broadband ready,” and the HUD Secretary should amend federal regulations to classify acquisition of broadband service as an acceptable operating expense for such housing.
- The Secretary of Commerce should instruct NTIA to conduct a study of broadband demand aggregation efforts across the country – interviewing government and private sector leaders with experience and cataloguing what has worked and what has not worked. NTIA should provide clear guidance and recommendations to states and localities on “how to” make such initiatives work.
- The Secretary of Education should undertake a thorough assessment of the digital literacy needs for the 21<sup>st</sup> century, determining what skills all students need to leverage broadband, when they need to acquire such skills and how they are best taught and learned.
- Congress should provide tax credits for parents or businesses to offer laptop computers and broadband access to lower income students.
- The Secretary of Labor should determine the most effective means for including broadband and computer subsidies in worker retraining and transitional assistance programs and for incorporating online retraining opportunities into existing programs.
- The Secretary of Health and Human Services should set standards for Medicare and Medicaid reimbursement for virtual doctor visits and consultations over high speed Internet.
- Congress or State leaders should address state licensure restrictions presently restricting the inter-state practice of medicine.
- The President should issue an Executive Order requiring every federal agency to provide its employees with personal, portable and private digital health records by 2012.



- Congress should boost federal R&D on networking and information technologies that focus on systems defense, intrusion detection and cyber security.
- Congress should expand FTC enforcement powers and penalties against spammers, fraudsters and malware creators.
- Congress should establish a federal task force -- including NIST, NSF, DOS, FTC, FCC and Department of Education experts, along with private-sector leaders -- to report on ways to improve the effectiveness and ease-of-use of online safety technologies.

### **Conclusion**

The Internet Innovation Alliance applauds the Administration for seeking a coherent set of policies and goals that complement and accelerate the efforts in the marketplace to achieve universal adoption of high speed Internet. Working together, public and private leaders can restore U.S. primacy in Internet technologies and ensure the benefits of true broadband reach all Americans in fewer than 10 years.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Larry Irving'.

Larry Irving, Co-Chair

A handwritten signature in black ink, appearing to read 'Bruce Mehlman'.

Bruce Mehlman, Co-Chair